

Amendments to the Claims:


This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method of ordering, paying for and delivering goods and services content, comprising:

ordering and paying for a the content by a user at a first location, the content being selected from a content provider;

transmitting a first service response value calculated by the user to the content provider;

 calculating a second service response value by a network operator when the user at a second location, different from the first location, requests the content from the network operator;

verifying, by the network operator contacting the content provider, that the first service response value matches the second service response value; and

transmitting the content to the user at the second location by the network operator when the first service response value matches the second service response value, wherein:

at least one of ordering and paying for the content, transmitting the first service response value, and transmitting the content is done by a network.

2. (original) The method recited in claim 1, wherein the first service response value is calculated by the user based on a random number supplied by the content provider and a first secret key possessed by the user.

3. (previously presented) The method recited in claim 1, wherein the second service response value is calculated by the network operator based on a random number received from the user and a second secret key possessed by the network operator and associated with the user.

4. (currently amended) The method recited in claim 2, wherein the first secret key is contained in a subscriber identification module provided by the network operator and contained in a mobile station within the network which is a wireless network operated by the network operator in such a manner that the mobile user and the mobile station may not discover the value of the secret key.

5. (original) The method recited in claim 3, wherein the second secret key is stored in an authentication center of a telecom infrastructure operated by the network operator and the first secret key and the second secret key are identical and assigned when the user subscribes for a telecommunication service provided by the network operator.

6. (original) The method recited in claim 4, wherein the first service response value is calculated by an A3 algorithm module contained in the subscriber identification module of the mobile station based on the first secret key and the random number.

7. (original) The method recited in claim 5, wherein the second service response value is calculated by an A3 algorithm module, contained in the authentication center of the telecom infrastructure, based on the second secret key, contained in the authentication center of the telecom infrastructure, and the random number.

8. (original) The method recited in claim 6, wherein the mobile station is a cellular phone with GSM authentication capability connected to a processor based system, or a WAP-capable cellular phone with GSM authentication capability, or a HTML capable cellular phone with GSM authentication capability.

9. (original) The method recited in claim 7, wherein the content is encrypted by the network operator using a cipher key, calculated by an A8 algorithm module based on the random number and the second secret key, prior to transmitting the content to the user.

10. (original) The method recited in claim 8, further comprising:
decrypting the content by the mobile station using an A8 algorithm module contained in the subscriber identification module of the mobile station to generate the cipher key based on the random number and the first secret key.

11. (original) The method recited in claim 9, wherein the cipher key is used as a seed to a cryptographic protocol which transforms the cipher key into a stronger cipher key.

12. (original) The method recited in claim 1, wherein the user pays the content provider for the content, using a credit card, debit card, or electronic transferral of funds.

13. (currently amended) A method of ordering, paying for and delivering ~~goods and services~~ content, comprising:

ordering a the content having a content ID by a user at a first location, the content being selected from a content provider;

transmitting a first service response value, a network identifier, and a cipher key by the user to the content provider;

transmitting the first service response value, the network identifier, and a random number to a network operator by the content provider;

calculating a second service response value and a cipher key by ~~a~~the network operator and determining if the first service response value matches the second service response value; and

transmitting the content to the user at a second location, different from the first location, when the first service response value matches the second service response value, by the content provider, wherein:


at least one of ordering the content, transmitting the first service response value, and transmitting the content is done by a network.

14. (Currently Amended) The method recited in claim 13, wherein the first service response value is calculated by the user based on a random number supplied by the content provider and a first secret key contained in a subscriber identification module provided by the network operator and contained in a mobile station within the network which is a wireless network operated by the network operator.

15. (previously presented) The method recited in claim 13, wherein the second service response value and a cipher key are calculated based on the random number, and a network identifier, used to access a second secret key located in an authentication center of a telecom infrastructure, received from the content provider.

16. (original) The method recited in claim 14, wherein the first secret key is not accessible directly by the user or the mobile station and the value of the secret key may not be discovered by the user, but is identical to the second secret key and both the first secret key and the second secret key are assigned when the user subscribes for a telecommunication service provided by the network operator.

17. (original) The method recited in claim 16, wherein the first service response value is calculated by an A3 algorithm module contained in the subscriber identification module of the mobile station based on the first secret key and the random number.



18. (original) The method recited in claim 15, wherein the second service response value is calculated by an A3 algorithm module, contained in the authentication center of the telecom infrastructure, based on the second secret key, contained in the authentication center of the telecom infrastructure, and the random number.

19. (original) The method recited in claim 17, wherein the mobile station is a cellular phone with GSM authentication capability connected to a processor based system, or a WAP-capable cellular phone with GSM authentication capability, or a HTML capable cellular phone with GSM authentication capability.

20. (original) The method recited in claim 18, wherein the content is encrypted by the network operator using the cipher key, calculated by an A8 algorithm module based on the random number and the second secret key, prior to transmitting the content to the user.

21. (original) The method recited in claim 19, further comprising:
decrypting the content by the mobile station using an A8 algorithm module contained in the subscriber identification module of the mobile station to generate a cipher key based on the random number and the first secret key.

22. (original) The method recited in claim 13, wherein the user is billed
by the network operator for the content in a telephone bill.

23. (original) The method recited in claim 13, further comprising:
hashing, by the user, a price of the content, the random number and a seller ID to create a hashed number;

computing, by the user, the first service response value based on the secret key and the hashed random number;

transmitting, by the user, the first service response value to the content provider;

transmitting, by the content provider, the random number, the seller ID the price of the content and the first service response to the network operator;

computing, by the network operator, the second service response value based on the secret key, the price transmitted by the content provider and the random number;

verifying, by the network operator that the first service response value matches the second service response value; and

billing the user, by the network operator, the price when the first service response value matches the second service response value in a telephone bill.

24. (original) The method recited in claim 20, wherein the cipher key is used as a seed to a cryptographic protocol which transforms the cipher key into a stronger cipher key.

25. (currently amended) A method of ordering, paying for and delivering ~~goods and services~~ content, comprising:

ordering ~~a~~ the content from a network operator, having a content ID selected by a user at a first location;

transmitting a first service response value calculated by the user to the network operator;

calculating a second service response value and a cipher key by ~~a~~ the network operator and determining if the first service response value matches the second service response value;

transmitting the content ID, and a cipher key to ~~the~~ a content provider; and

transmitting the content to the user at a second location, different from the first location, by the content provider when requested by the user, wherein:

at least one ~~or of~~ ordering the content, transmitting the first service response value, and transmitting the content is done by a network.

26. (original) The method recited in claim 25, wherein the first service response value is calculated by the user based on a random number supplied by the network operator and a first secret key possessed by the user.


27. (original) The method recited in claim 25, wherein the second service response value is calculated by the network operator based on the random number and a second secret key possessed by the network operator and associated with the user.

28. (currently amended) The method recited in claim 26, wherein the first secret key is contained in a subscriber identification module provided by the network operator and contained in a mobile station within the network which is a wireless network operated by the network operator in such a manner that the user and the mobile station may not discover the value of the secret key.

29. (original) The method recited in claim 27, wherein the second secret key is stored in an authentication center of a telecom infrastructure operated by the network operator and the first secret key and the second secret key are identical and assigned when the user subscribes for a telecommunication service provided by the network operator.

30. (original) The method recited in claim 28, wherein the first service response value is calculated by an A3 algorithm module contained in the subscriber identification module of the mobile station based on the first secret key and the random number.

31. (previously presented) The method recited in claim 29, wherein and the second service response value is calculated by an A3 algorithm module, contained in the authentication center of the telecom infrastructure based on the second secret key, contained in the authentication center of the telecom infrastructure, and the random number.

 32. (original) The method recited in claim 30, wherein the station is a cellular phone with GSM authentication capability connected to a processor based system, or a WAP-capable cellular phone with GSM authentication capability, or a HTML capable cellular phone with GSM authentication capability.

33. (original) The method recited in claim 31, wherein the content is encrypted by the content provider using a cipher key, calculated by an A8 algorithm module based on the random number and the second secret key and supplied by the network operator, prior to transmitting the content to the user.

34. (original) The method recited in claim 32, further comprising:

decrypting the content received by from the content provider by the mobile station using an A8 algorithm module contained in the subscriber identification module of the mobile station to generate a cipher key based on the random number and the first secret key.

35. (original) The method recited in claim 33, wherein the cipher key is used as a seed to a cryptographic protocol which transforms the cipher key into a stronger cipher key.

36. (original) The method recited in claim 25, wherein the user is billed by the network operator for the content in a telephone bill.

37. (currently amended) A method of ordering, paying for and delivering ~~goods and services~~ content, comprising:

ordering a the content, having a content ID, by a user at a first location, the content being selected from a network operator;

transmitting a first service response value calculated by the user to the network operator;

calculating a second service response value and a cipher key by the network operator and determining if the first service response value matches the second service response value; and

transmitting the content to the user at a second location, different from the first location, by the network operator when requested by the user wherein:

at least one of ordering the content, transmitting the first service response value, and transmitting the content is done by a network.

38. (original) The method recited in claim 37, wherein the first service response value is calculated by the user based on a random number supplied by the network operator and a first secret key possessed by the user.

39. (previously presented) The method recited in claim 37, wherein the second service response value is calculated by the network operator based on a random number and a second secret key possessed by the network operator and associated with the user.

40. (currently amended) The method recited in claim 38, wherein the first secret key is contained in a subscriber identification module provided by the network operator and contained in a mobile station within the network which is a wireless network operated by the network operator in such a manner that the user and the mobile station may not discover the value of the secret key.

41. (original) The method recited in claim 39, wherein the second secret key is stored in an authentication center of a telecom infrastructure operated by the network operator and the first secret key and the second secret key are identical and assigned when the user subscribes for a telecommunication service provided by the network operator.

42. (original) The method recited in claim 40, wherein the first service response value is calculated by an A3 algorithm module contained in the subscriber identification module of the mobile station based on the first secret key and the random number.

43. (original) The method recited in claim 41, wherein the second service response value is calculated by an A3 algorithm module, contained in the authentication center of the telecom infrastructure, based on the second secret key, contained in the authentication center of the telecom infrastructure, and the random number.

44. (currently amended) The method recited in claim 42, wherein the mobile station is a cellular phone with GSM authentication capability connected to a processor based system, or a WAP-capable cellular phone with GSM authentication capability, or a HTML capable cellular phone with GSM authentication capability.

45. (original) The method recited in claim 43, wherein the content is encrypted by the network operator using a cipher key, calculated by an A8 algorithm module based on the random number and the second secret key and supplied by the network operator, prior to transmitting the content to the user.

46. (original) The method recited in claim 44, further comprising:
decrypting the content received by from the network operator by the mobile station using an A8 algorithm module contained in the subscriber identification module of the mobile station to generate a cipher key based on the random number and the first secret key.

47. (original) The method recited in claim 45, wherein the cipher key is used as a seed to a cryptographic protocol which transforms the cipher key into a stronger cipher key.

48. (original) The method recited in claim 37, wherein the user is billed by the network operator for the content in a telephone bill.

49. (currently amended) A method of ordering, paying for and delivering ~~goods and services~~ contents, comprising:

ordering and paying for ~~a plurality of the~~ contents by a user at a first location, the content being selected from a content provider;

transmitting a plurality of first service response values calculated by the user to the content provider;

calculating a plurality of second service response values by a network operator when the user at a second location, different from the first location, requests one of the ~~plurality of~~ contents from the network operator;

verifying, by the network operator contacting the content provider, that one of the plurality of first service response values associated with the requested contents matches one of the plurality of second service response values associated with the requested contents; and

transmitting one of the requested contents to the user at a second location different from the first location, by the network operator when the one of the plurality of first service response values matches the one of the plurality of second service response values, wherein:

at least one of ordering and paying for the plurality of contents, transmitting the plurality of first service response values, and transmitting the requested content is done by a network.

50. (original) The method recited in claim 49, wherein the plurality of first service response values are calculated by the user based on a plurality of random numbers supplied by the content provider and a first secret key possessed by the user.

51. (previously presented) The method recited in claim 49, wherein the plurality of second service response values are calculated by the network operator based on a plurality of random numbers received from the user and a second secret key possessed by the network operator and associated with the user.

52. (currently amended) The method recited in claim 50, wherein the first secret key is contained in a subscriber identification module provided by the network operator and contained in a mobile station within the network which is a wireless network operated by the network operator in such a manner that the user and the station may not discover the value of the secret key.

53. (original) The method recited in claim 51, wherein the second secret key is stored in an authentication center of a telecom infrastructure operated by the network operator and the first secret key and the second secret key are identical and assigned when the user subscribes for a telecommunication service provided by the network operator.

54. (original) The method recited in claim 52, wherein the plurality of first service response values are calculated by an A3 algorithm module contained in the subscriber identification module of the mobile station based on the first secret key and the plurality of random numbers.

55. (original) The method recited in claim 53, wherein and the plurality of second service response values are calculated by an A3 algorithm module, contained in the authentication center of the telecom infrastructure based on the second secret key, contained in the authentication center of the telecom infrastructure, and the plurality of random numbers.

56. (original) The method recited in claim 54, wherein the mobile station is a cellular phone with GSM authentication capability connected to a processor based system, or a WAP-capable cellular phone with GSM authentication capability, or a HTML capable cellular phone with GSM authentication capability.

57. (currently amended) The method recited in claim 55, wherein the requested content is encrypted by the network operator using a cipher key, calculated by an A8 algorithm module based on a random number of the plurality of random numbers and the second secret key, prior to transmitting the requested to the user.

58. (previously presented) The method recited in claim 56, further comprising:

decrypted the requested content by the mobile station using an A8 algorithm module contained in the subscriber identification module of the mobile station to generate a cipher key based on one random number of the plurality of random numbers and the first secret key.

59. (original) The method recited in claim 57, wherein the cipher key is used as a seed to a cryptographic protocol which transforms the cipher key into a stronger cipher key.

60. (original) The method recited in claim 49, wherein the user pays the content provider for the plurality of contents, using a credit card, debit card, or electronic transferral of funds.

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✓ Claims 61-114 - (canceled)

115. (New) A method in accordance with claim 1 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive

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the content at the second location.

116. (New) A method in accordance with claim 2 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive

the content at the second location.

117. (New) A method in accordance with claim 3 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive

the content at the second location.

118. (New) A method in accordance with claim 4 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

119. (New) A method in accordance with claim 5 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

120. (New) A method in accordance with claim 6 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

121. (New) A method in accordance with claim 7 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

122. (New) A method in accordance with claim 8 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

123. (New) A method in accordance with claim 9 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

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124. (New) A method in accordance with claim 10 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

125. (New) A method in accordance with claim 11 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

126. (New) A method in accordance with claim 12 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

127. (New) A method in accordance with claim 13 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

 128. (New) A method in accordance with claim 14 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

129. (New) A method in accordance with claim 15 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

130. (New) A method in accordance with claim 16 wherein:

the network is a wireless network operated by the network operator;

and


the user uses the mobile station within the wireless network to receive the content at the second location.

131. (New) A method in accordance with claim 17 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive

 the content at the second location.

132. (New) A method in accordance with claim 18 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

133. (New) A method in accordance with claim 19 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

134. (New) A method in accordance with claim 20 wherein:

the network is a wireless network operated by the network operator;

and

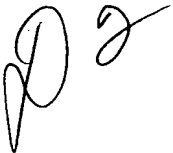
the user uses a mobile station within the wireless network to receive the content at the second location.

135. (New) A method in accordance with claim 21 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.



136. (New) A method in accordance with claim 22 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

137. (New) A method in accordance with claim 23 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

138. (New) A method in accordance with claim 24 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

139. (New) A method in accordance with claim 25 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

 140. (New) A method in accordance with claim 26 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

141. (New) A method in accordance with claim 27 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

142. (New) A method in accordance with claim 28 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

143. (New) A method in accordance with claim 29 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

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144. (New) A method in accordance with claim 30 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

145. (New) A method in accordance with claim 31 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

146. (New) A method in accordance with claim 32 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

147. (New) A method in accordance with claim 33 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

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148. (New) A method in accordance with claim 34 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

149. (New) A method in accordance with claim 35 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

150. (New) A method in accordance with claim 36 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

151. (New) A method in accordance with claim 37 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

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152. (New) A method in accordance with claim 38 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

153. (New) A method in accordance with claim 39 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

154. (New) A method in accordance with claim 40 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

155. (New) A method in accordance with claim 41 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

 156. (New) A method in accordance with claim 42 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

157. (New) A method in accordance with claim 43 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

158. (New) A method in accordance with claim 44 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

159. (New) A method in accordance with claim 45 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

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160. (New) A method in accordance with claim 46 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

161. (New) A method in accordance with claim 47 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

162. (New) A method in accordance with claim 48 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

163. (New) A method in accordance with claim 49 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive

 the content at the second location.

164. (New) A method in accordance with claim 50 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

165. (New) A method in accordance with claim 51 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

166. (New) A method in accordance with claim 52 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

167. (New) A method in accordance with claim 53 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

168. (New) A method in accordance with claim 54 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

169. (New) A method in accordance with claim 55 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

170. (New) A method in accordance with claim 56 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

171. (New) A method in accordance with claim 57 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

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172. (New) A method in accordance with claim 58 wherein:

the network is a wireless network operated by the network operator;

and

the user uses the mobile station within the wireless network to receive the content at the second location.

173. (New) A method in accordance with claim 59 wherein:

the network is a wireless network operated by the network operator;

and

the user uses a mobile station within the wireless network to receive the content at the second location.

174. (New) A method in accordance with claim 60 wherein:

the network is a wireless network operated by the network operator;

 and

the user uses a mobile station within the wireless network to receive
the content at the second location.
